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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,357	01/24/2002	Christopher F. O'Hare	A34871	2008
21003	7590	10/17/2003	EXAMINER	
			SINGH, SUNIL	
		ART UNIT		PAPER NUMBER
		3673		

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/057,357	O'HARE, CHRISTOPHER F.
	Examiner	Art Unit
	Sunil Singh	3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 September 2003.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-13 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

4) Interview Summary (PTO-413) Paper No(s) _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Altemus '357 in view of Japanese document (2001-271363).

Altemus discloses a module comprising a concrete block (10), at least one through hole (14) which is partially filled with concrete (see col. 1 line 58; col. 2 line 36, col. 4 line 39), at least one projection (38), at least one recess (42). Altemus discloses the invention substantially as claimed.

However, Altemus is silent about his concrete column comprising a mixture which is specifically formulated for underwater placement.

Japanese document '363 teaches a concrete column comprising a mixture which is specifically formulated for underwater placement (see abstract, Fig. 3 and attached definition of "grout"). It would have been considered obvious to one of ordinary skill in the art to modify Altemus by using specifically formulated underwater placement concrete as taught by Japanese document for the concrete column disclosed by Altemus since such an arrangement would allow for a retaining wall to be built adjacent a river because concrete that is specifically formulated for underwater

placement sets up faster and would not deteriorate rapidly when exposed to water.

3. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Makram '110 in view of Japanese document (2001-271363).

Makram discloses a module comprising a concrete block, at least one through hole which is partially filled with concrete (see Fig. 7, page 1 left col. Line 23, page 3 left col. Lines 38-70), at least one projection, at least one recess (see Figs. 1-3, 7). Makram discloses the invention substantially as claimed. However, Makram is silent about his concrete column comprising a mixture which is specifically formulated for underwater placement. Japanese document '363 teaches a concrete column comprising a mixture which is specifically formulated for underwater placement (see abstract, Fig. 3 and attached definition of "grout"). It would have been considered obvious to one of ordinary skill in the art to modify Makram by using specifically formulated underwater placement concrete as taught by Japanese document for the concrete column disclosed by Makram since such an arrangement would allow for a retaining wall to be built adjacent a river because concrete that is specifically formulated for underwater placement sets up faster and would not deteriorate rapidly when exposed to water.

4. Claims 1, 2, 6-10, 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altemus '357 in view of Karnas '489 or Suzuki '057 and Japanese document (2001-271363).

Altemus discloses the invention substantially as claimed. However, Altemus is silent about his concrete block/module being used as artificial reef. Further, Altemus is silent about his concrete column comprising a mixture which is specifically formulated for underwater placement. Karnas and Suzuki both teach concrete block/module being used as artificial reef (see Figs. 1, 2 and 22 respectively). Japanese document '363 teaches a concrete column comprising a mixture which is specifically formulated for underwater placement (see abstract, Fig. 3 and attached definition of "grout"). It would have been considered obvious to one of ordinary skill in the art to modify Altemus and use his concrete block/module as an artificial reef as taught by either Karnas or Suzuki since such a structure would more effectively withstand tidal current meaning not topple over or move thus defeating its intended purpose. In addition it would have been considered obvious to one of ordinary skill in the art to modify Altemus by using specifically formulated underwater placement concrete as taught by Japanese document for the concrete column disclosed by Altemus since such an arrangement would allow for the reef to be formed in situ.

With regards to claim 7, Altemus (as modified by Karnas or Suzuki and Japanese document '363) is silent about the reinforcing rod being fiberglass. Reinforcing rods being made out of fiberglass are well known and old in the art (see US PAT. PUB. 2003/0009970). It would have been considered obvious to one of ordinary skill in the art to further modify the

modified Altemus by making the reinforcing rods out of fiberglass since this would prevent rusting.

With regards to claims 9 and 10, Altemus (as modified by Karnas or Suzuki and Japanese document '363) is silent about his projections and recess being frustoconical and hemispherical in shape. Projections and their corresponding recesses being frustoconical and hemispherical in shape are well known and old in the art. It would have been considered obvious to one of ordinary skill in the art to modify the modified Altemus by making his projections and recesses frustoconical or hemispherical in shape since this is a mere design choice.

5. Claims 1, 3-5, 7, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makram '110 in view of Karnas '489 or Suzuki '057 and Japanese document (2001-271363).

Makram discloses the invention substantially as claimed. However, Makram is silent about his concrete block/module being used as artificial reef. Further, Makram is silent about his concrete column comprising a mixture which is specifically formulated for underwater placement. Karnas and Suzuki both teach concrete block/module being used as artificial reef (see Figs.1, 2 and 22 respectively). Japanese document '363 teaches a concrete column comprising a mixture which is specifically formulated for underwater placement (see abstract, Fig. 3 and attached definition of "grout"). It would have been considered obvious to one of ordinary skill in the art to modify Makram and use his concrete block/module as an

artificial reef as taught by either Karnas or Suzuki since such a structure would more effectively withstand tidal current meaning not topple over or move thus defeating its intended purpose. In addition it would have been considered obvious to one of ordinary skill in the art to modify Makram by using specifically formulated underwater placement concrete as taught by Japanese document for the concrete column disclosed by Makram since such an arrangement would allow for the reef to be formed in situ.

With regards to claim 7, Makram (as modified by Karnas or Suzuki and Japanese document '363) is silent about the reinforcing rod being fiberglass. Reinforcing rods being made out of fiberglass are well known and old in the art (see US PAT. PUB. 2003/0009970). It would have been considered obvious to one of ordinary skill in the art to further modify the modified Makram by making the reinforcing rods out of fiberglass since this would prevent rusting.

With regards to claim 10, Makram (as modified by Karnas or Suzuki and Japanese document '363) is silent about his projections and recess being hemispherical in shape. Projections and their corresponding recesses being hemispherical in shape are well known and old in the art. It would have been considered obvious to one of ordinary skill in the art to modify the modified Makram by making his projections and recesses hemispherical in shape since this is a mere design choice.

Response to Arguments

6. Applicant's arguments filed 9/26/2003 have been fully considered but they are not persuasive. With regards to claim 11 applicant argues that both Altemus and Makram do not teach an artificial reef module. It should be noted that claim 11 calls for a **module for use in assembling an artificial reef** and therefore a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Applicant argues that the passageways of Altemus are for the installation of plumbing or electrical lines. Altemus clearly teaches that the passageways can be filled with reinforced rods or concrete or both (see col. 1 line 58; col. 2 line 36, col. 4 line 39).

7. Applicant's arguments with respect to claim 11 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that Altemus and Makram do not teach a concrete column comprising a mixture that is specifically formulated for underwater placement. The examiner agrees; however, Japanese document '363 teaches this feature.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be

Art Unit: 3673

established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the knowledge generally available to one of ordinary skill in the art would lead the skilled artesian to the brick/block art for making/forming an artificial reef wherein the artificial reef is made out of brick/block. It should be noted that a basement wall, a retaining wall and a fence all could be formed using the same brick/block while they are subjected to different forces. There are artificial reefs made out of tires; therefore one skilled in the artificial reef art would look to the tire art when improving an artificial reef made out of tire. Would applicant in this case argue that the "tire art" is non-analogous? The answer is no. Therefore since it is well known in the artificial reef art that artificial reefs are made out of brick/blocks, it makes it perfectly analogous for the skilled artesian to look to the brick/block art when making an artificial reef. Further evidence of looking to the brick/block art when forming an artificial reef is provided in the areas searched in US Patent to Karnas wherein the block/brick art US class 52 was searched while looking to make an artificial reef.

9. Applicant argues that the concrete in the through holes doesn't bond therein. This is not concurred with since both Altemus and Makram teach to fill

their through holes with concrete such concrete would inherently bond therein.

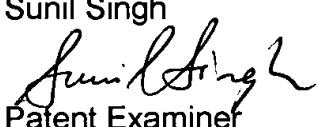
Such bonding is clearly depicted in Figure 7 of the Makram reference.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (703) 308-4024. The examiner can normally be reached on Monday through Friday 8:30 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703) 308-2978. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

Sunil Singh

Patent Examiner
Art Unit 3673

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October 15, 2003

grooving their minds with cannabis joined or sifted by a groove intensely 4 : to interact id rock ~ together — Benjamin Franklin

a. 1937) : MARVELOUS. WONDERFUL; interesting, enjoyable; not to

grope, fr. OE grāpiān; akin to *gefeōd* 'feel about blindly or uncertainly' 2 : to look for something (the right words) 3 : to feel one's own way by groping — *gripe n*

(if *grossbe*, fr. *gras* thick + berries of Europe or America having

—hen [G] (1946) — see *schilling* at coarse texture] (1869) : a strong k or rayon and often with cotton

ick, coarse, fr. L *grossus*] (14c) 1

(1) : glaringly noticeable usu. objectionableness (~ error) (2)

c : visible without the aid of a : excessively fat b : growing or 3 a : of, relating to, or dealing with: consisting of an overall one — compare *NET* 4 : made up CORPORAL (the ~er part of human taste : UNDISCRIMINATING 6 NT. UNTUTORED 7 a : coarse in b : gravely deficient in civility or c : a scatological rather than a portmanteau) syn see COARSE, FLAGRANT

M 2 : an overall total exclusive of

n (an overall total) exclusive of de-

- grosser n

F grosse, fr. fem. of *gross*] (14c) : an pencils)

—anatomy that deals with the ma-

gans

the total value of the goods and ser-

—nation during a specified period [as

1 n [NL *Grossularia*, genus name of RITE

—harit, fr. NL *Grossularia*] (ca. 1847)

vn, or red garnet Ca, Al, SiO₄,

size *grōshv*, n, pl *grossy* [Pol.] (1949)

a] (1506) : GROTTO

It; MF, fr. Olt (pictura) grotto] (1561) 1

—a cave, fr. *grotta grotto*] (1561) 1

—criticized by fanciful or fantastic hu-

manity, ugliness, or caricature b

—that is grotesque 3: SAN SERIF

4: having the characteristic

BIZARRE b : absurdly incongruous

or unnatural, the expected, or the typi-

cal adv — *grotesque-ness* n

grō-tēs-kə-rēv, n, pl -ties [*grotesque-ness* that is grotesque 2: the quality

QUEENESS

—also grottos [It *grotta*, *grotta*, CAVE 2: an artificial recess or

—cave]

if grutch (grudge)] (1895) 1

—a plaint (never nursed a ~ five min-

ually irritable or complaining op-

erative)

—ier, -est (1895) : given to grun-

ch, *adv* — *grouch-ness* *chē-nēs*

grund; akin to OHG *grunt* ground

[12c] 1 a : the bottom of a body

2 : ground coffee beans after

or argument (~ for complaint) ex-

perimental logical condition (2) sur-

rounding area : BACKGROUND

uni 4 a : the surface of the earth

purpose (parade ~) (fishing or

going to a house or other building)

or as if in battle e : an area

of ~ in his lecture) b : a hole

in rock or formation through which

an object that makes an electrical

conducting body (as the earth)

in circuit and as an arbitrary

unit with a ground 7 : a football

field — from the ground up 8 : en-

teriorly; thoroughly

—bottom, *thoroughly* — to chum

—essary or tolerable; to chum

—NewswEEK — off the ground

program never got off the ground

going to or place on the ground

for our fears about Jerry Lee

K. Williams) b : to instill

—critically with a ground

to throw (a football) intensively

groove, fr. OE grāfan; akin to

—groove, *adv* — *groove-ness* *grōvē-nēs*

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